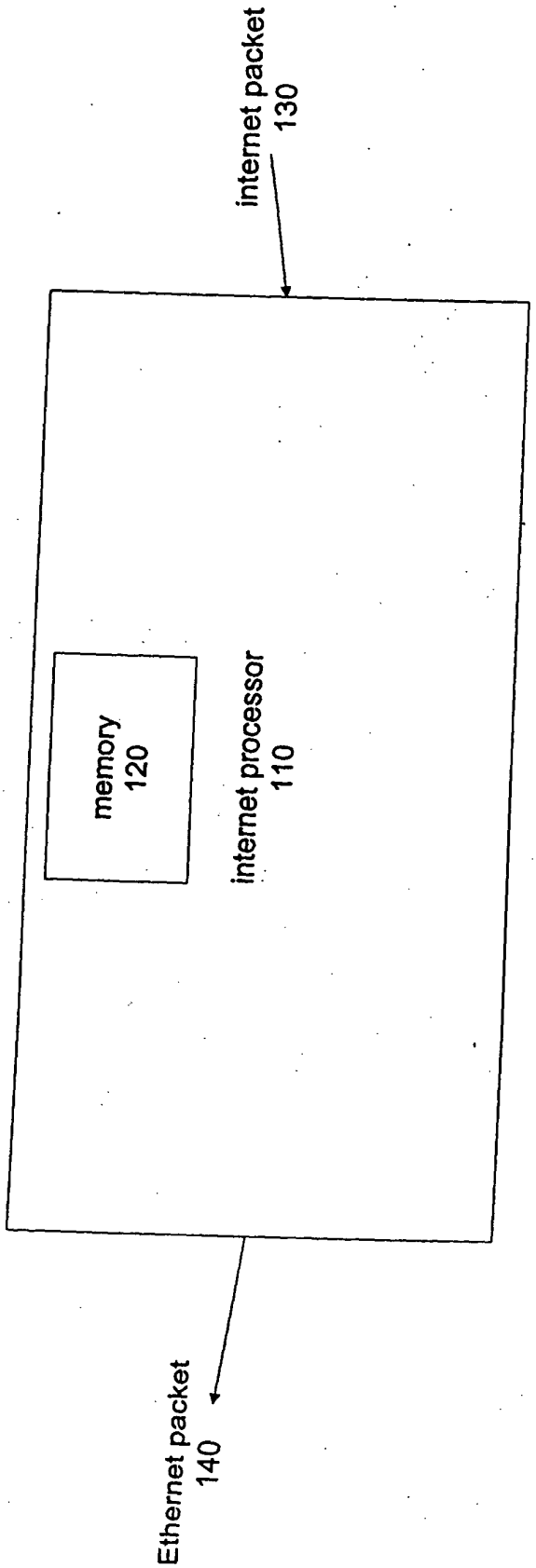
internet packet
130
memory
120
internet processor
110
Ethernet packet
140

Figure 1

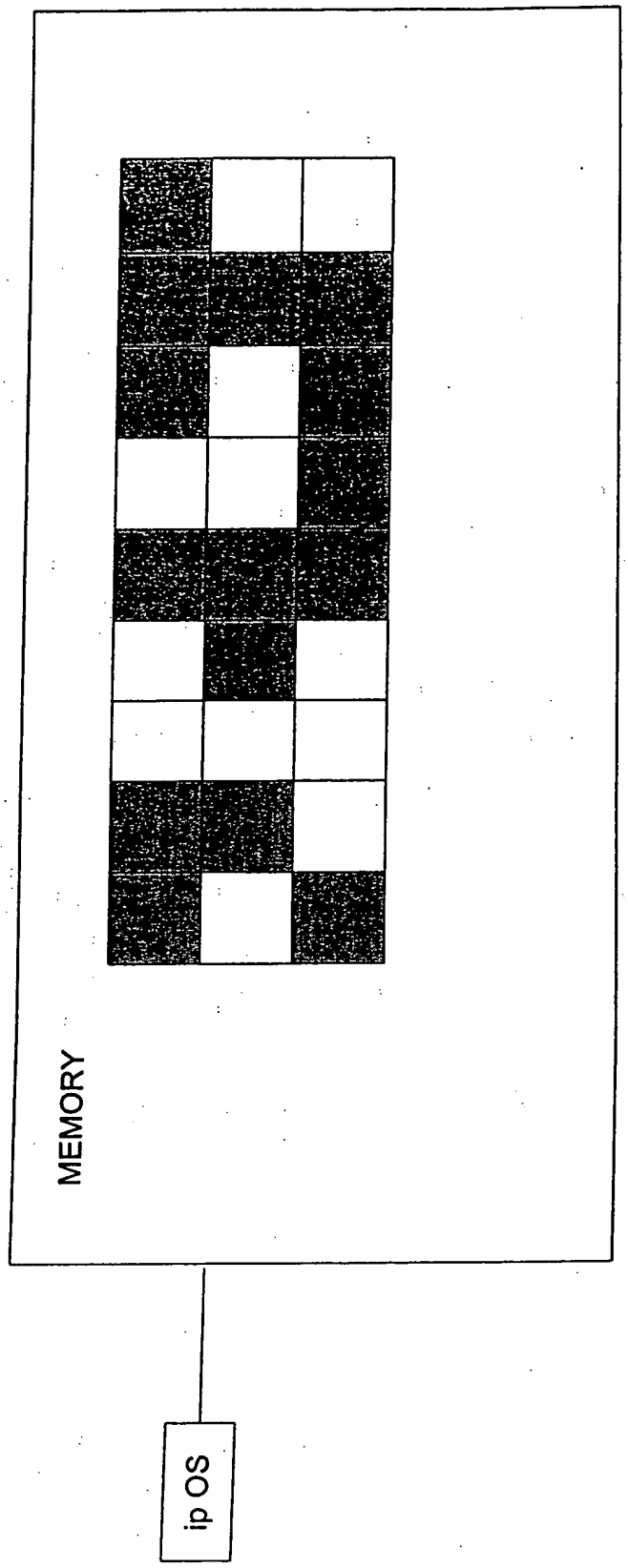

Figure 2

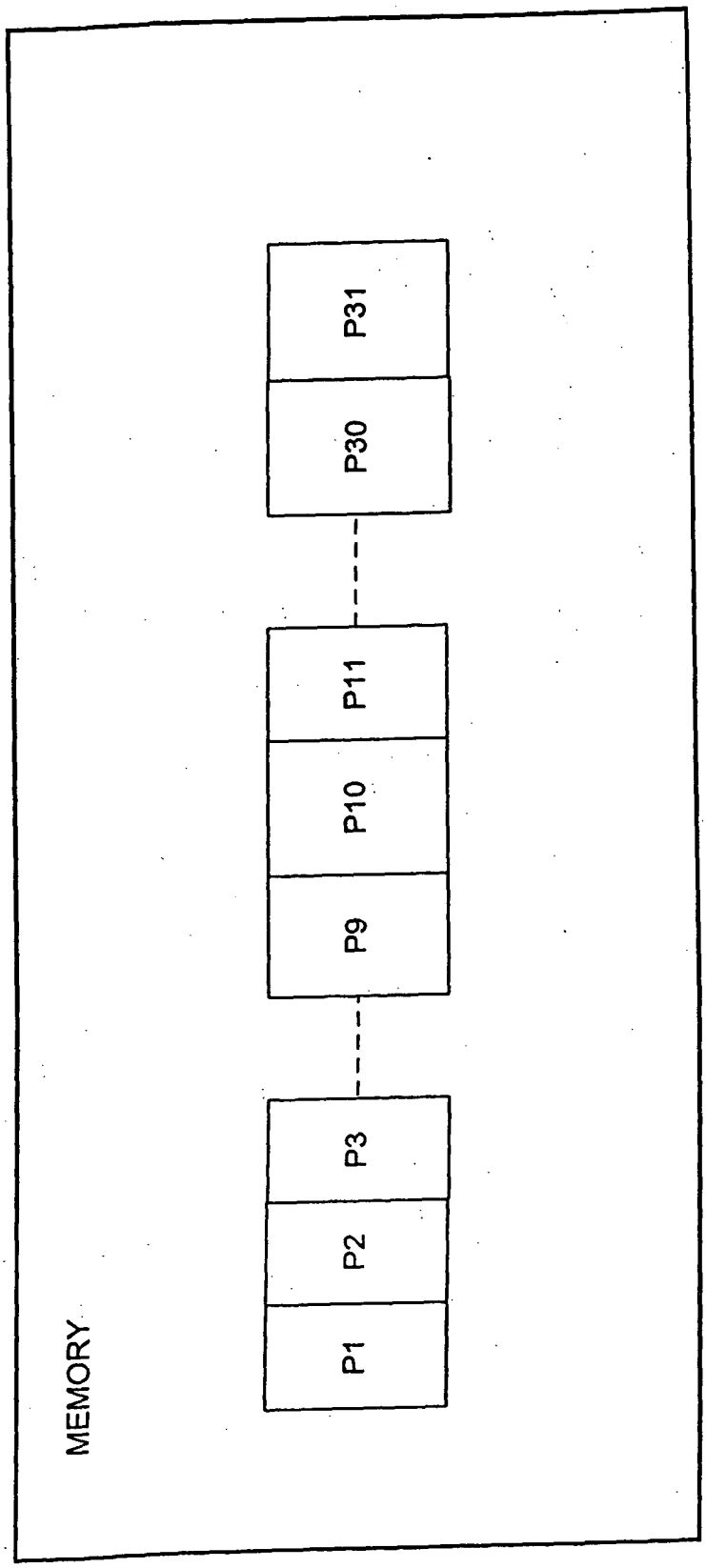

Figure 3

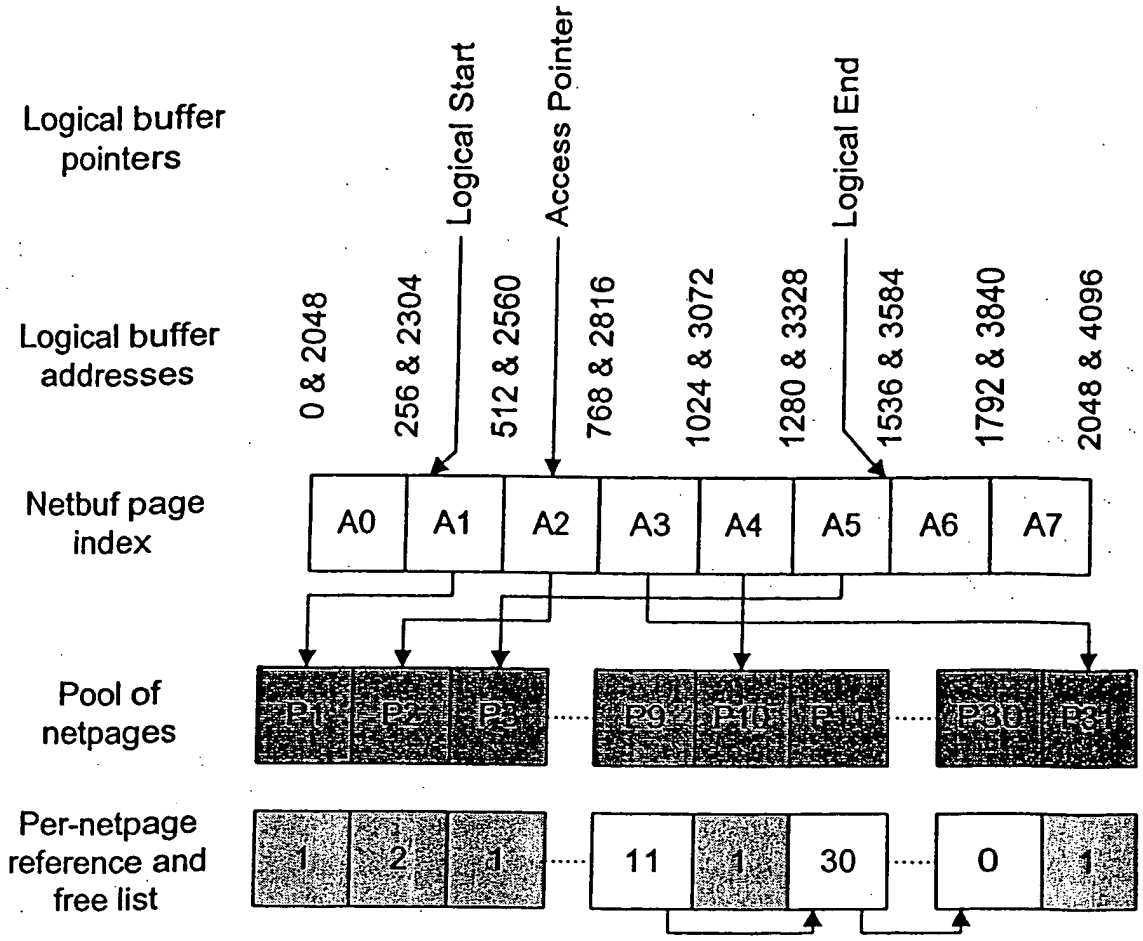
Logical buffer pointers
Logical buffer addresses
Netbuf page index
Pool of netpages
Per-netpage reference and free list
Logical Start
Access Pointer
Logical End
0 & 2048
256 & 2304
512 & 2560
768 & 2816
1024 & 3072
1280 & 3328
1536 & 3584
1792 & 3840
2048 & 4096
A0
A1
A2
A3
A4
A5
A6
A7
P1
P2
P3
P9
P10
P11
P30
P31
1
2
1
11
1
30
0
1

FIGURE 4

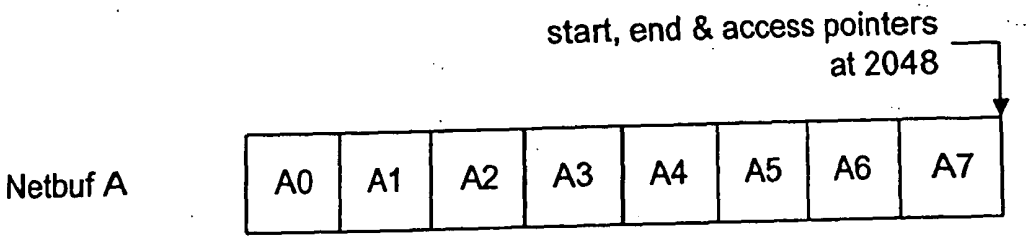

FIGURE 5

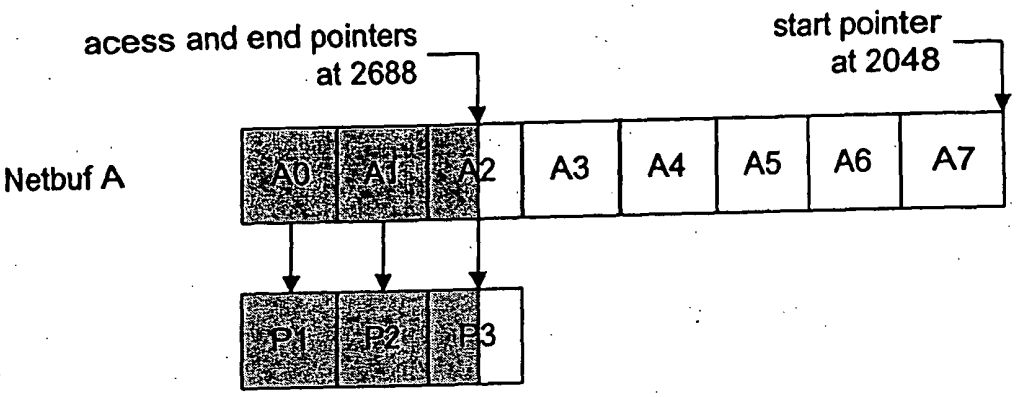

FIGURE 6

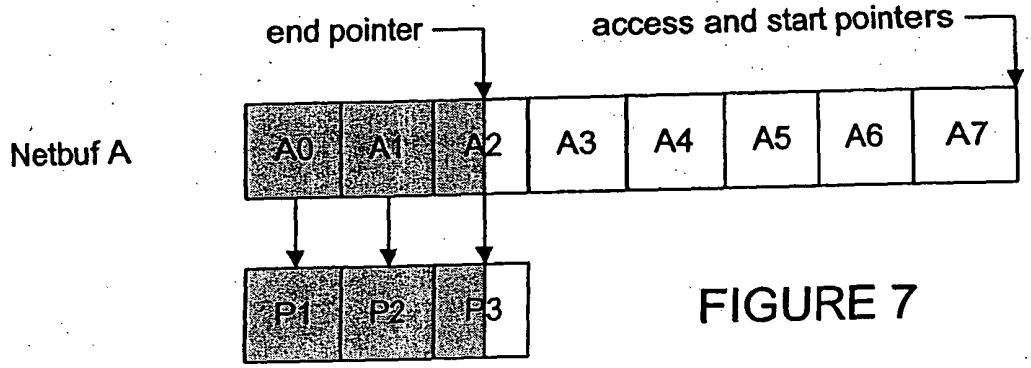

FIGURE 7

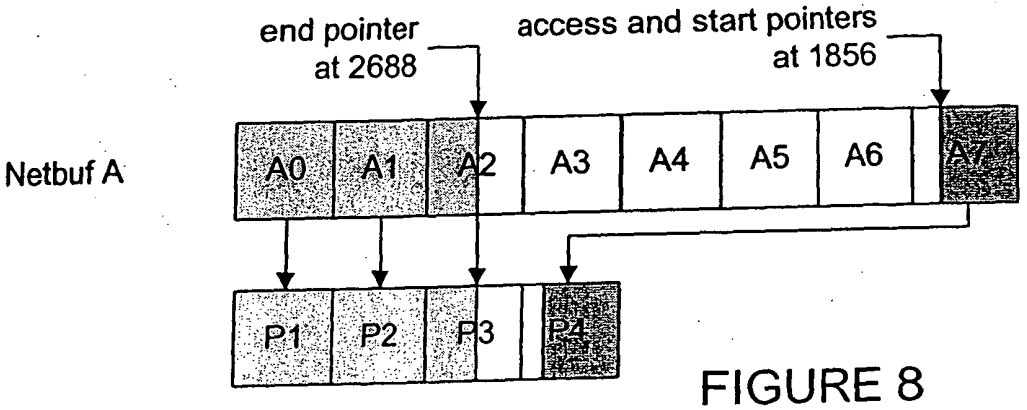

FIGURE 8

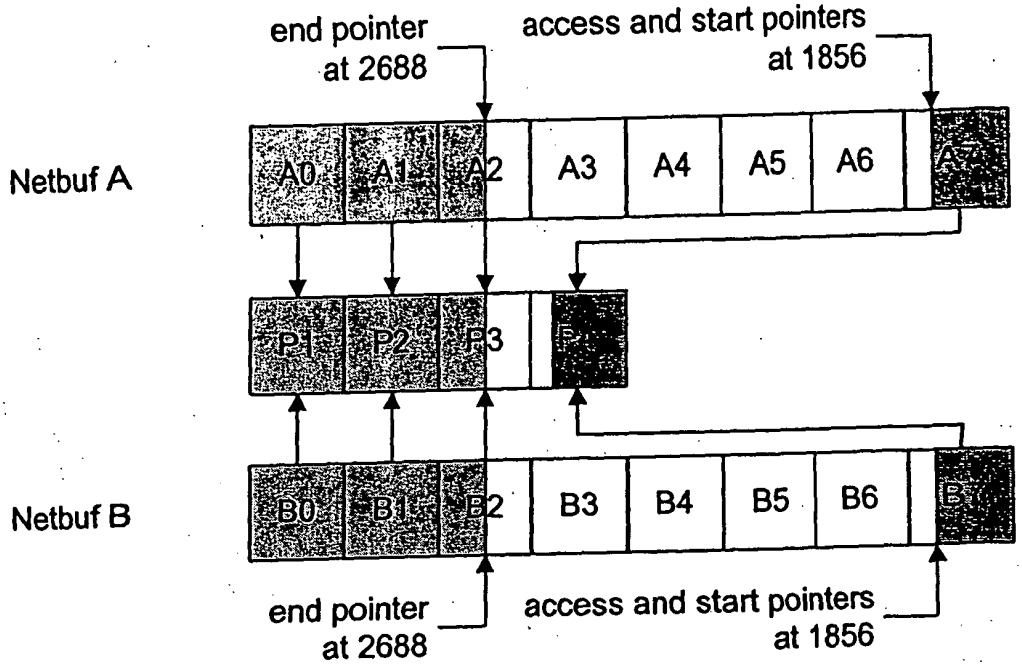

FIGURE 9

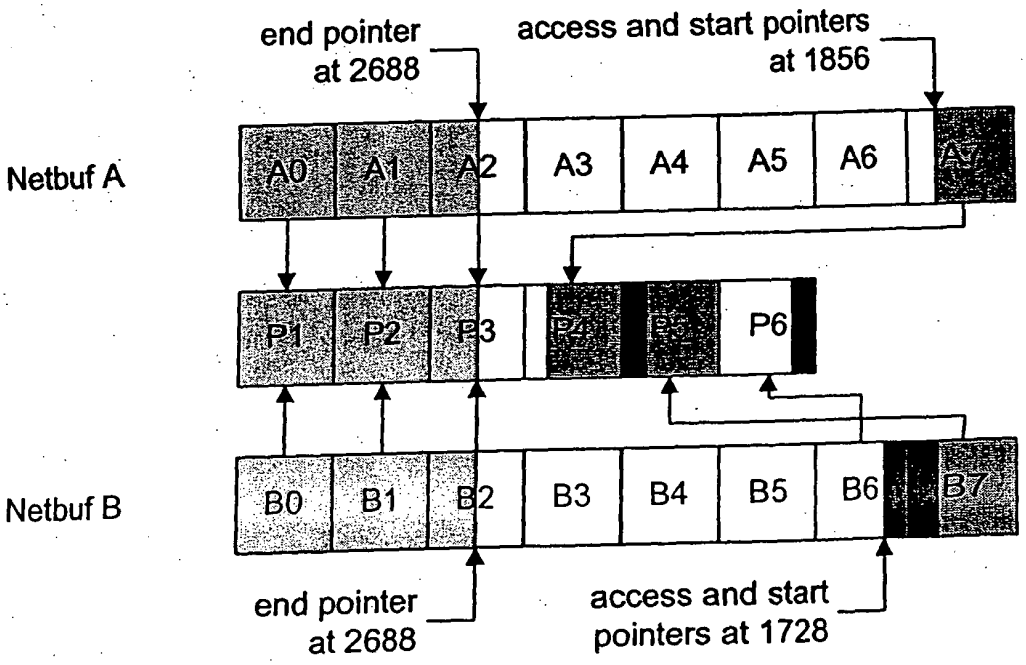

FIGURE 10

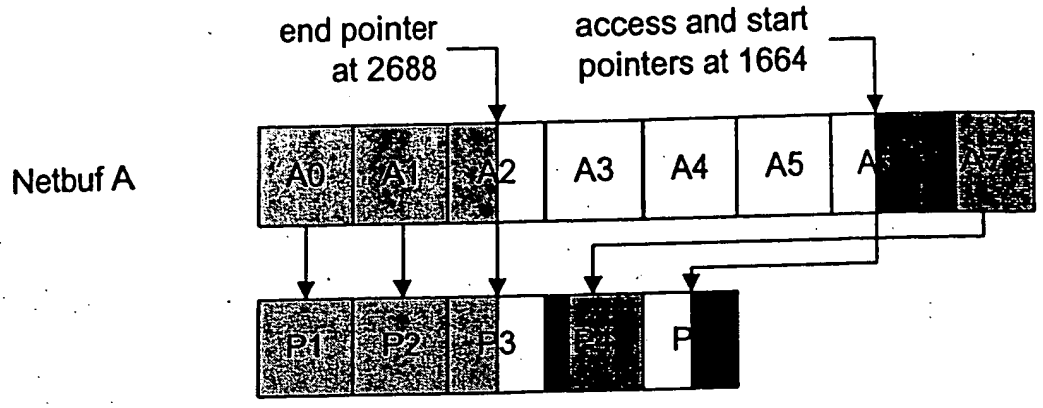

FIGURE 11

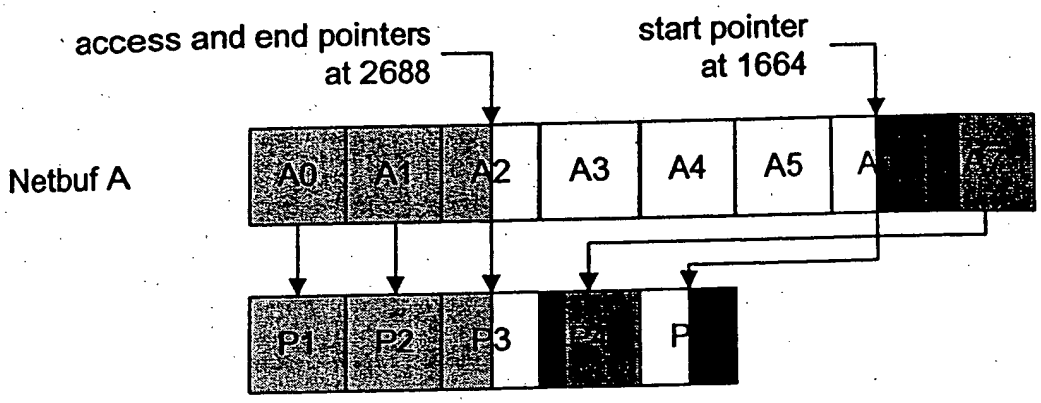

FIGURE 12

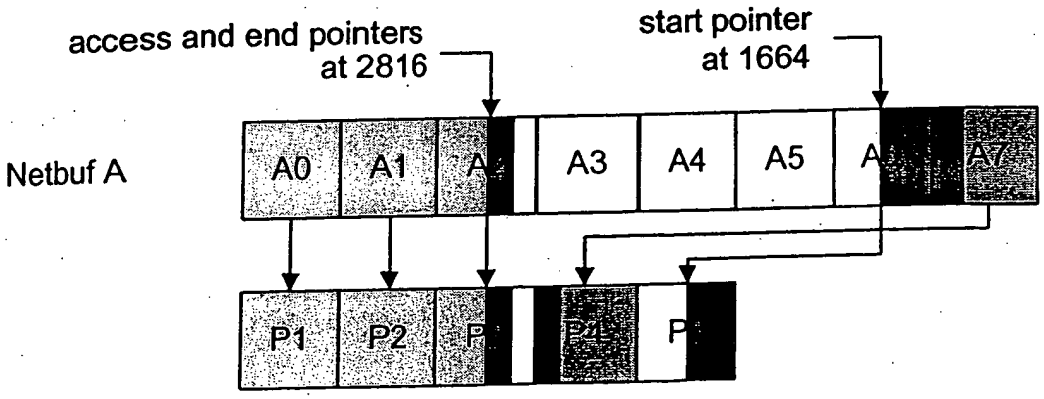

FIGURE 13

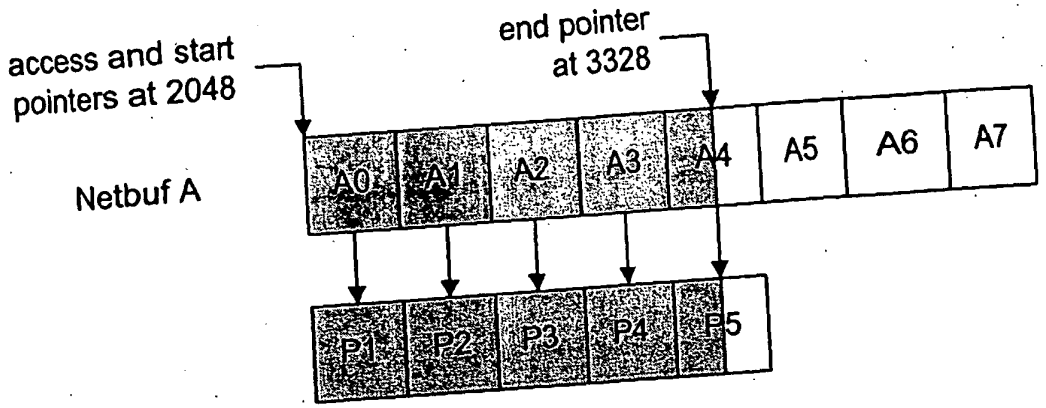

FIGURE 14

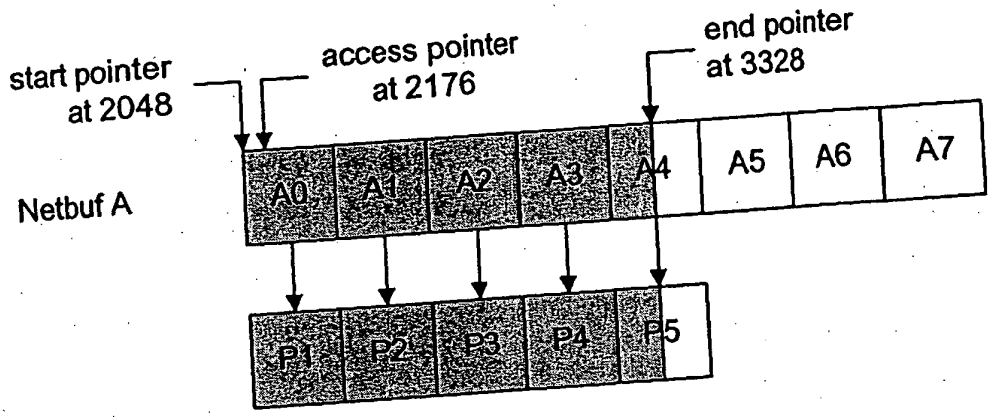

FIGURE 15

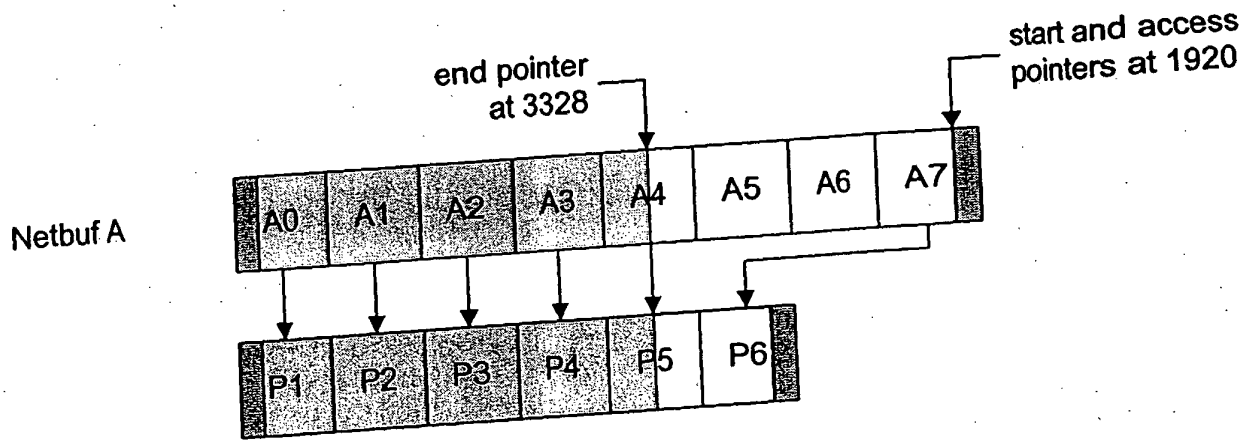

FIGURE 16

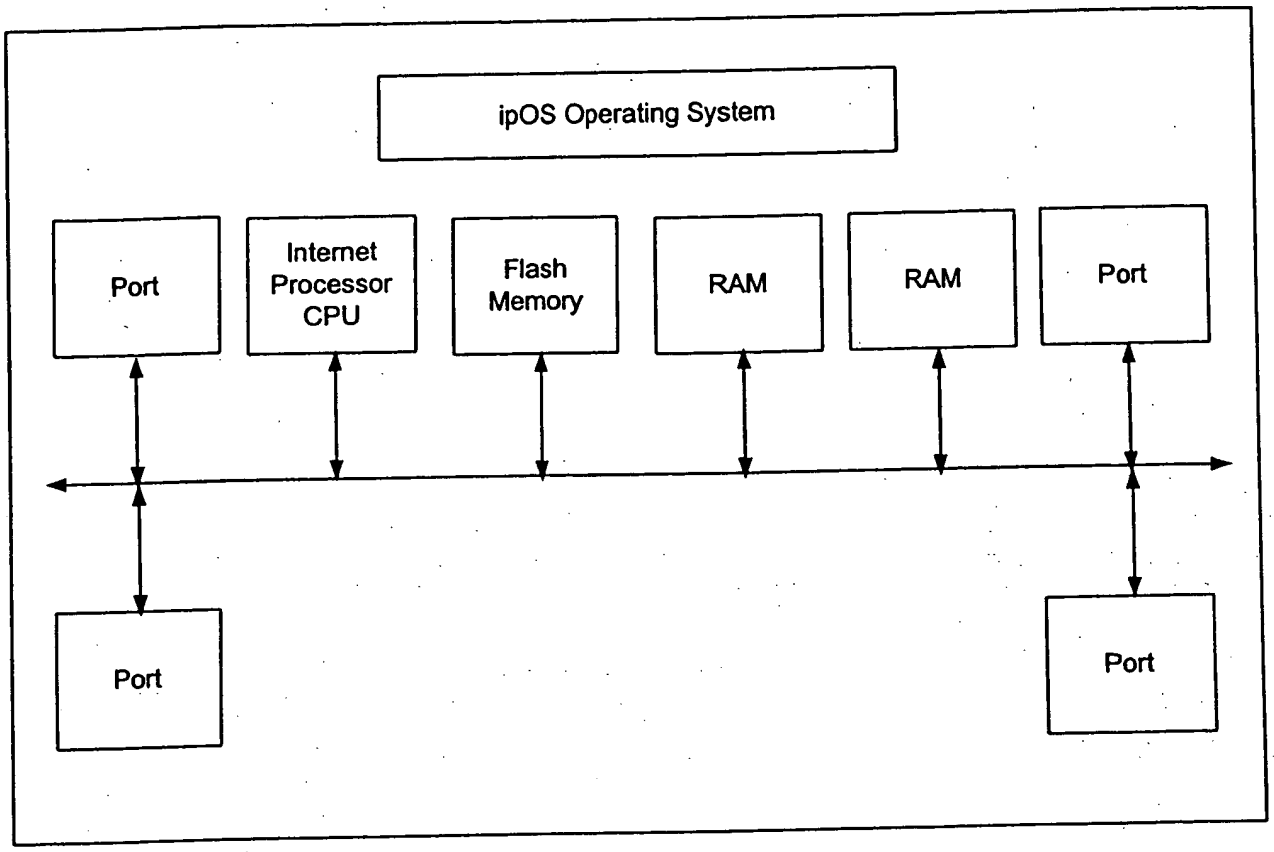
ipOS Operating System
Port
Internet Processor CPU
Flash Memory
RAM
RAM
Port
Port
Port

FIGURE 17

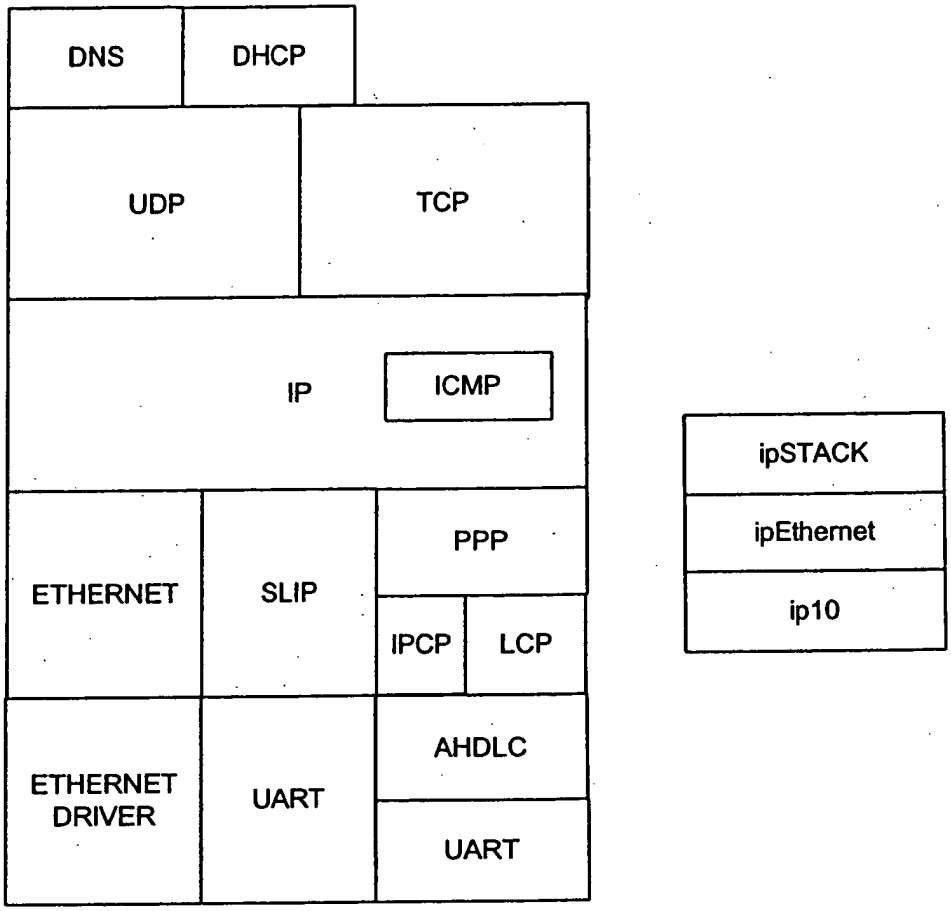
DNS
DHCP
UDP
TCP
IP
ICMP
ETHERNET
SLIP
PPP
IPCP
LCP
ETHERNET DRIVER
UART
AHDLC
UART
ipSTACK
ipEthernet
ip10

FIGURE 18